

EXHIBIT 4

Ravgen, Inc.
v.
Natera, Inc. and NSTX, Inc.

Civil Action No. 6:20-cv-00451

Expert Report of Paul K. Meyer

TM Financial Forensics, LLC

August 6, 2021



Paul K. Meyer

Table 1 – Summary of Reasonable Royalty Damages
June 1, 2014 – December 31, 2020⁴

Accused Products	Billed Units	Royalty Rate ⁵	Total Royalty Damages
Billed Commercial Units	1,871,226	\$100	\$ 187,122,600
Non-Billed / Non-Commercial Units	388,803	\$75	29,160,225
Total	2,260,029		\$ 216,282,825

IV. BACKGROUND

A. Ravgen, Inc.

20. Ravgen (Rapid Analysis of Variations in the GENome) was founded in September 2000 by Dr. Ravinder Dhallan with the goal of “developing fetal DNA sequencing methods for patients seeking a prenatal test which is both safe during pregnancy and highly accurate.”⁶ Ravgen currently offers noninvasive prenatal

⁴ **Attachment 4.** Natera has only provided sales of the Accused Products through December 31, 2020. However, the reasonable royalty rates of \$100 per-unit for commercial purposes or \$75 per unit for research purposes would apply to sales of Accused Products through patent expiration. I have estimated sales of the Accused Products through patent expiration based on the unit sales of each Accused Product in 2020 (see **Attachment 5**). This is conservative as the Accused Products have experienced significant growth year over year. See **Attachment 4A** for estimated damages from January 1, 2021 through March 13, 2023 (patent expiration). This results in total damages of \$344,965,219 [Calculated as: \$187,122,600 + \$29,160,225 + \$122,595,559 + \$6,086,835 = \$344,965,219] through patent expiration. At a no less than reasonable royalty of \$60 per unit, total damages would be \$135,601,740 [Calculated as: \$112,273,560 + \$23,328,180 = \$135,601,740] through December 31, 2020 and \$214,028,543 [Calculated as: \$112,273,560 + \$23,328,180 + \$73,557,335 + \$4,869,468 = \$214,028,543] through patent expiration. See **Attachments 4.1** and **4.1A**. I reserve the right to supplement my opinions should Natera produce updated sales data.

⁵ My reasonable royalty rate would not change whether both of the Asserted Patents or only one the Asserted Patents is found to be valid and infringed as both Asserted Patents assert claims that include the use of agents that inhibit cell lysis, which is essential to the commercialization of non-invasive tests that utilize cell-free DNA.

⁶ About Ravgen: [<https://ravgen.com/who-we-are/>]; Prenatal Genetic Testing: [<https://ravgen.com/prenatal-single-gene-tests/>]. See also: About Ravgen: RAVGEN-00022447-22456, at 448; Prenatal Genetic Testing: RAVGEN-00022432-22433, at 432.

[REDACTED]

2. The Thermo Fisher Agreement

99. On June 23, 2021, Ravgen entered into a Patent License Agreement with Thermo Fisher Scientific, Inc. (the “Thermo Fisher Agreement”).¹⁷⁶
100. The Thermo Fisher Agreement states that “[s]ubject to the provisions of this Agreement and the receipt by Ravgen of Thermo Fisher's payment under Section 3.1,” Ravgen: (1) “grants Thermo Fisher and its Affiliates a personal, non-exclusive, non-transferable, non-assignable... perpetual, irrevocable, fully paid up, worldwide license under the Ravgen Licensed Patents, to make, have made, have used, sell... Covered Products, and to practice and have practiced any method, process and/or procedure claimed in the Ravgen Licensed Patents;” and (2) “releases, acquits and discharges the Thermo Fisher Released Parties from any claim, counterclaim, demand, allegation, damage, ... for any alleged past infringement of the Ravgen Licensed Patents prior to the Effective Date of this Agreement.”¹⁷⁷
101. The Thermo Fisher payment under Section 3.1 of the agreement is \$58,000.¹⁷⁸ Covered Products, License Term, Ravgen’s Patents, Ravgen Licensed Patents and Ravgen Remaining Patents are defined in the Thermo Fisher Agreement as follows:¹⁷⁹

[REDACTED]

¹⁷⁵ Discussions with Dr. Ravinder Dhallan.

¹⁷⁶ Patent License Agreement between Ravgen, Inc. and Thermo Fisher Scientific, Inc., June 23, 2021 (“Thermo Fisher Agreement”): RAVGEN-00050167-180.

¹⁷⁷ Thermo Fisher Agreement: RAVGEN-00050167-180 (at 169).

¹⁷⁸ Thermo Fisher Agreement: RAVGEN-00050167-180 (at 172).

¹⁷⁹ Thermo Fisher Agreement: RAVGEN-00050167-180 (at 167-168).

1.6 “Ravgen Licensed Patents” means United States Patent Nos. 7,121,120 and 7,332,277.

1.7 “Ravgen Remaining Patents” means all U.S. and foreign patents, patent applications, and provisional applications owned or controlled by Ravgen as of the Effective Date, excluding the Ravgen Licensed Patents, including utility and design patent applications and patents resulting from such provisional applications, any divisionals, renewals, extensions, continuations, foreign counterparts, reissues and re-examinations of those patents, patent applications and provisional applications, and any other U.S. or foreign patent or patent application owned by Ravgen that claims priority, directly or indirectly, to any such patents, patent applications, and provisional applications.

1.2 “Covered Products” means any Thermo Fisher or Thermo Fisher Affiliate product, as well as any methods, processes, services, or procedures that are employed by Thermo Fisher or its Affiliates in connection with manufacture, use, or sale of such product.

1.3 “License Term” means the period beginning on the Effective Date and ending on the expiration of the last date that any of the Licensed Patents are enforceable.

1.4 “Ravgen’s Patents” means the Ravgen Licensed Patents and the Ravgen Remaining Patents.

102. In exchange for Thermo Fisher’s covenant not to challenge the Ravgen Remaining Patents, Ravgen provided Thermo Fisher with a “Covenant Not to Sue,” and “Release” with respect to the Ravgen Remaining Patents subject to certain limitations.¹⁸⁰ Thermo Fisher also covenanted not to challenge Ravgen Licensed Patents.¹⁸¹

103. I understand that to \$58,000 royalty was calculated [REDACTED]

[REDACTED]

[REDACTED]

¹⁸⁰ Thermo Fisher Agreement: RAVGEN-00050167-180 (at 170-171).

¹⁸¹ Thermo Fisher Agreement: RAVGEN-00050167-180 (at 170).

[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

104. [REDACTED]

105. [REDACTED]

182 Thermo Fisher Agreement: RAVGEN-00050167-180 (at 172); T ermo [REDACTED]

183 [REDACTED]

184 [REDACTED]